

## **Executive Summary**

The Office of Assessments has been working on transitioning the New Jersey Assessment of Skills and Knowledge (NJ ASK) for the past two years. The methodology included an alignment study between *New Jersey Core Curriculum Content Standards* (NJCCCS) and the *Common Core State Standards* (CCSS); an item review for rigor and depth associated with the CCSS; and field testing CCSS aligned items.

The 2013 NJ ASK<sup>1</sup> will measure the CCSS within the current NJ ASK blueprint. The NJ ASK assessments are called “transitional” because we will not be able to measure the full range of the CCSS until the next generation assessments are developed and administered. The Partnership for Assessment of Readiness for College and Careers (PARCC) is currently developing the next generation assessments to be administered in spring 2015.

The CCSS has key instructional shifts that will be measured on the NJ ASK. In English Language Arts (ELA), the shifts are more subtle because the NJ ASK blueprint has historically included text dependent constructed-response items in Reading and multiple writing prompts in every grade level. The CCSS shifts in ELA are: increasing text complexity and emphasis on academic vocabulary; building of knowledge through content-rich informational text; text-dependent reading questions to elicit responses grounded in specific evidence from the text. In Mathematics, the CCSS shifts are significant because new content will appear per grade level. During the transitional years, mathematical instruction should begin to connect the content standards with the mathematical practices.

The Science assessment in grades 4 and 8 will continue to measure the *New Jersey Core Curriculum Content Standards* (NJCCCS). The score categories and the content of the assessments will remain the same.

Contact information is listed at the end of the PowerPoint presentation for each individual involved in the NJ ASK assessment process. Please contact the appropriate individual if you have any questions.

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<sup>1</sup> The NJ ASK math grades 6 through 8 will transition to the Common Core State Standards in 2013-2014.

# New Jersey Assessment of Skills and Knowledge (NJ ASK) 2012-2013

A Summary of Core Test Design and Administrative  
Features for Grades 3-8

New Jersey Department of Education  
Division of Academics  
Office of Assessments

September 2012

# Introduction

- The 2013 NJ ASK\* will measure the Common Core State Standards (CCSS) within the current NJ ASK blueprint.
- The NJ ASK assessments are called “transitional” because we will not be able to measure the full range of the CCSS until the next generation assessments are developed and administered.
- New Jersey is a Governing state in The Partnership for Assessment of Readiness for College and Careers (PARCC). PARCC is currently developing the next generation assessments to be administered in Spring 2015.

**\* The NJ ASK math grades 6 through 8 will transition to the Common Core State Standards in 2013-2014.**

## Introduction (Cont.)

- The Office of Assessments has been working on the transition to the CCSS for the past two years.
- The office methodically reviewed standards, reviewed our item bank and field-tested items to ensure a smooth transition.

# Methodology

- NJ ASK transition to the CCSS included:
  - An alignment study between New Jersey Core Curriculum Content Standards (NJCCCS) and CCSS.
  - A review of items aligned to NJCCCS and CCSS to determine if the items had the rigor and depth associated with the CCSS.
  - Field-tested CCSS items on the 2012 NJ ASK to increase our CCSS item pool for 2013 operational assessment.

# Alignment Study

- Conducted an alignment study to determine which NJCCCS standards were aligned to the CCSS.
- Items aligned to CCSS were re-coded in our item bank as **possible** items for use on future assessments. Items aligned only to NJCCCS will no longer be used.

# Item Review to CCSS

- The next critical step was to have New Jersey's item review committees review the items aligned to the NJCCCS and CCSS to determine if items had the depth and rigor associated with the CCSS.
- Items determined to have the depth and rigor associated with the CCSS were re-coded to be used on future assessments. Items without that depth and rigor will not be used.

# Field-Tested Items

- Items that measure the CCSS were developed.
- CCSS items were field-tested on the 2012 NJ ASK assessment.
- Field-tested items in 2012 ensured that the 2013 NJ ASK would measure the CCSS within the NJ ASK blueprint.
- **Note: Field-test items did not count towards students' scores.**



# NJ ASK Transition: Summary

- Instruction must be aligned to the CCSS.
- Classroom instruction based on the NJCCCS or instruction that is limited to the NJCCCS that are aligned to the CCSS can result in students being introduced to unfamiliar content or topics during testing. (Exception: Math, Grades 6-8).

# NJ ASK Transition: Notes

- The Office of Assessments used the *PARCC Model Content Frameworks* as a guide. Example: NJ ASK point values in each score category for Math 3-5 were based on the major, supportive, and additional standards per the *PARCC Model Content Frameworks*.
- In terms of shifts in NJ ASK content, mathematics has more obvious shifts than English Language Arts (ELA), but the nuances in ELA are important and must be reflected in classroom instruction.

# NJ ASK CCSS Content Shifts

- In mathematics, the shifts appear in new content per grade level.
- In ELA, the shifts are more subtle because the NJ ASK blueprint has historically included text dependent constructed-response items in Reading and multiple writing prompts in every grade level.
- Writing prompts will become more text dependent during the transition, but not fully realized until the next generation (PARCC) assessments are implemented.

# NJ ASK CCSS Content Shifts (cont.)

- The narrative writing prompt will remain.
- Students will also respond to writing prompts based on a short text (two to three sentences to one paragraph) and will supplement their responses by using facts from the text.
- The 2013 NJ ASK writing section will not include a longer reading passage (multiple paragraphs) that students would read and draw evidence from to support their writing.

# NJ ASK English Language Arts Grades 3 – 8 2013

# 2013 English Language Arts Updates

- For grades 3 through 5, the poem prompt will no longer be read aloud to students by the examiner. Students will read the poem independently.
- Examiners will no longer have a test booklet during testing, unless they are testing students with specific accommodations. More guidance will be forthcoming.

# ELA Instructional Shifts

- The CCSS in English Language Arts focus on:
  - Increasing text complexity and emphasis on academic vocabulary.
  - Building of knowledge through content-rich informational text.
  - Text-dependent reading questions to elicit responses grounded in specific evidence from the text.
- These areas of focus are reflected in the reading and writing tasks of the NJ ASK assessments at all grade levels.

# ELA Transition to the CCSS

- For both reading and writing tasks, students at all grade levels are expected to ground their responses in specific evidence and information from texts they have read, film or shows they have viewed, or facts they have learned in social studies or science. Students are not to “invent” information except when they write narratives. Classroom instruction needs to be moving towards having students respond to text by citing evidence from text read, movies, television shows, digital sources, etc.
- Expectations are that a student’s ability to use text-based information increases with each grade level, and that a student’s skills at any grade level will improve with an increased emphasis on text-based understanding in classroom instruction.



# ELA Transition to the CCSS (cont.)

- All passages will require students to read and to comprehend at the higher end of text complexity for their grade level. **(NOTE: NJ ASK historically uses texts at this level whenever content is appropriate.)**
- Students will be expected to comprehend and accurately use grade-appropriate general academic and domain-specific words and phrases in their reading and writing.
- The scoring of student-constructed responses in both reading and writing will reflect the degree to which students refer to or incorporate pertinent text-based ideas and information into their work.

# ELA Test Design Grades 3-5

Test Types/Strand (additional field test content embedded throughout)	Reading Selections	MC (Number of Items)	OE (Number of Items)	Writing Tasks (Number of Items)	Time on Task(s) in Approximate Minutes	Total Points*
Writing: Narrative				1	30 minutes	10
Writing: Informative/ Explanatory or Opinion				1	30 minutes	10
Reading : (Literature and Informational Text)	3	18 (Grade 3) 24 (Grade 4) 30 (Grade 5)	3 (Grade 3) 3 (Grade 4) 3 (Grade 5)		30 minutes each	30 (Grade 3) 36 (Grade 4) 42 (Grade 5)
Total	3	18 (Grade 3) 24 (Grade 4) 30 (Grade 5)	3 (Grade 3) 3 (Grade 4) 3 (Grade 5)	2	150 minutes	50 (Grade 3) 56 (Grade 4) 62 (Grade 5)

\*NJ ASK 3- 5 writing is scored using a 5-point rubric. OE reading items are scored using a 0-4 point rubric.

# ELA Test Design Grades 6-8

Test Types/Strand (additional field test content embedded throughout)	Reading Selections	MC (Number of Items)	OE (Number of Items)	Writing Tasks (Number of Items)	Time on Task(s) in Approximate Minutes	Total Points*
Writing: Persuasive OR Argument Task				1	45 minutes	12
Writing: Informative/ Explanatory OR Narrative Task				1	30 minutes	6
Reading Passage: (Literature and Informational Text)	4	36	4		30 minutes each	52
Total	4	36	4	2	195 minutes	70

\*NJ ASK 6- 8 writing is scored using a 6 - point rubric. OE reading items are scored using a 0 - 4 point rubric.

# ELA Reading

- NJ ASK 3-5 operational tests include three reading passages at each grade level.
- NJ ASK 6-8 operational tests include four reading passages per grade level.
- Reading passages will include informational reading selections as well as literature from a wide array of authentic sources.
- Fifty percent or more of the reading passages are informational.

# ELA Reading (cont.)

- All reading items will present questions that address the Common Core State Standards strands:
  - Key Ideas and Details
  - Craft and Structure
- All reading constructed-response items will continue to be scored using the Open-Ended Reading rubric, 0-4 points.
- The reading comprehension constructed-response questions measure the Common Core State Standards for Literature and Informational texts.
- Additional field-test passages and items will be included. They will not be counted in the student score.

# English Language Arts (ELA) Writing

## Grades 3 – 5

- ELA writing tasks require students to respond for a variety of purposes (e.g., informative/explanatory, opinion, and narrative).
- All writing prompt responses will continue to be scored using the modified NJ Registered Holistic Scoring Rubric (a 5-point scale).
- Additional field-test writing prompts will be included. They will not be included in the students' scores.

# ELA Writing Prompts

## Grades 3-5

- There are two formats for assessing informative/explanatory writing: one format introduces a topic in a brief prompt and asks students to write a piece about that topic; the second format uses a poem to introduce a topic. That topic is elaborated further by a brief prompt that students use as a basis for writing. Common Core State Standards: W.3.2, W.4.2, W.5.2
- Informative/explanatory prompts are based on topics familiar to students and ask them to describe, discuss, explain, or analyze some aspect of the topic. Students are able to draw on their own experience or opinions and what they know to develop ideas for their writing. Common Core State Standards: W.3.2, W.4.2, W.5.2
- The narrative prompt presents a brief scenario which students use as a springboard for writing a story, drawing on stories they have read as well as on their own experiences to develop ideas. Common Core State Standards: W.3.3, W.4.3, W.5.3
- Scoring for all writing tasks also addresses the Language strand of the Common Core State Standards: L.3.1, L.3.2, L.3.3, L.4.1, L.4.2, L.4.3, L.5.1, L.5.2, L.5.3

# Sample Informative/Explanatory Writing Prompt

## Grades 3-5

### CCSS: W.3.2, W.4.2, W.5.2

Scientists report that gray squirrels find hundreds of nuts each week that they bury in different places. Then the squirrels dig up all those nuts and bury them again in new spots. They also dig some holes that they don't ever use for storing nuts. What problems could these actions cause for a gray squirrel?

Write a composition discussing the problems squirrels could have because of the way they bury their nuts. Explain why you think they bury and rebury their nuts. Analyze or explain why squirrels might dig holes they do not want to use.



# Sample Informative/Explanatory Writing Prompt

## Grades 3-5


CCSS: W.3.2, W.4.2, W.5.2

*(Students first read the Holly Davis poem, “Lucky Grandma!”.)*

The child in the poem “*Lucky Grandma!*” helps her grandmother with many things. Think about a time when you helped someone. Write a composition about that time.

In your composition, be sure to:

- Explain who the person was.
- Describe what you did to help.
- Explain why you liked helping this person.



# Sample Narrative Writing Prompt

## Grades 3-5

### CCSS: W.3.3, W.4.3, W.5.3

When Tony arrived home after school, the large package was there waiting for him on the kitchen table. He had been waiting for days for it to arrive, and now he had it in his hands. Quickly, he tore open the package and examined the contents.

Write a story about the reason for Tony's excitement.

# English Language Arts (ELA) Writing Grades 6 - 8

- ELA writing tasks require students to respond for a variety of purposes (e.g., informative/explanatory, argument or persuasion, and narrative).
- All writing prompt responses will continue to be scored using the NJ Registered Holistic Scoring Rubric (a 6-point scale).
- Additional field-test writing prompts will be included. They will not be included in the students' score.

# ELA Writing Prompts

## Grades 6-8

- The writing tasks for argument ask the student to support or oppose a claim or position on a given issue arising from interpersonal, school/community, or social contexts. Common Core State Standards: W.6.1, W.7.1, W.8.1; W.6.4, W.7.4, W. 8.4.
- The persuasive writing tasks elicit the student's point of view or opinion regarding a given controversy arising in interpersonal, school/community, or societal contexts. Common Core State Standards: W.6.4, W.7.4, W. 8.4.
- The informative/explanatory prompt presents students with a topic based on a quotation or adage, or based on a familiar subject. Each is a springboard for the student to write an essay. Explanatory writing is used to share knowledge and to convey ideas and experiences. Explanatory writing may be based on the writer's personal knowledge or on information presented to the writer. Common Core State Standards: W.6.2, W.7.2, W.8.2; W.6.4, W.7.4, W. 8.4.
- The narrative prompt presents a brief scenario which students use as a springboard for writing a story, drawing on literature they have read as well as their own experiences and imagination to develop ideas. Common Core State Standards: W.6.3, W.7.3, W.8.3; W.6.4, W.7.4, W. 8.4.
- Scoring for all writing tasks also addresses the language strand of the Common Core State Standards: L.6.1- 3, L.7.1- 3, L.8.1- 3.

# Sample Argument Writing Prompt Grades 6-8

## CCSS: W.6.1, W.7.1, W. 8.1; W.6.4, W.7.4, W. 8.4

### WRITING SITUATION

Educational researchers claim that student learning will improve if all printed textbooks are replaced with electronic textbooks, known as e-textbooks. Based on the researchers' findings, students in your school will be issued an e-textbook reader, which is a device that displays electronic books.

### WRITING TASK

Write an essay either supporting or opposing the claim that student learning will improve if all student textbooks are replaced with electronic reading books. Use your knowledge and your own experience or observation to develop your essay. Use reasons, facts, examples and/or other evidence to support your position.

# Sample Persuasive Writing Prompt Grades 6-8

## CCSS: W.6.4, W.7.4, W. 8.4

### WRITING SITUATION

Your state is considering whether to charge a \$2 fee for each person to enter and use parks and community playgrounds. The money would be used to maintain and improve buildings, fields, courts, and playground equipment. This proposal is controversial, and many citizens have strong opinions about the idea.

You decide to write an editorial for the local newspaper expressing your opinion about whether to charge a \$2 fee for each person to enter and use parks and community playgrounds.

### WRITING TASK

Write an editorial for the local newspaper expressing your opinion about whether to charge a \$2 fee for each person to enter and use parks and community playgrounds. Be sure to include reasons, facts, examples, and/or other evidence to support your position.

# Sample Informative/Explanatory Writing Prompt

## Grades 6-8

CCSS: W.6.2, W.7.2, W. 8.2; W.6.4, W.7.4, W. 8.4

Anne Frank once said, “How wonderful it is that nobody need wait a single moment before starting to improve the world.” Think about what Anne Frank is saying regarding how people can improve the world around them.

Write an essay about how people can improve the world around them. Use your knowledge and your own experience or observation to develop your essay. Use details, reasons, and examples in your explanation.

# Sample Narrative Writing Prompt

## Grades 6-8

CCSS: W.6.3, W.7.3, W. 8.3; W.6.4,W.7.4,W.8.4

Think what it would be like to live one day in the setting of your favorite book or short story. What would happen to you in this place? What would you do?

Use your knowledge of the setting of a book or short story along with your imagination to write a story about your experience in this place.



# ELA/Literacy Resources

Common Core State Standards:

<http://www.corestandards.org/>

PARCC August 2012 Frameworks:

<http://www.parcconline.org/mcf/english-language-artsliteracy/overview-frameworks-elaliter>

# PARCC Writing Standards Progressions

## Grades 3 - 8

Grade 2 – Grade 3:

<http://www.parcconline.org/mcf/english-language-artsliteracy/writing-standards-progression-grade-2-grade-3>

Grade 3 to Grade 4:

<http://www.parcconline.org/mcf/english-language-artsliteracy/writing-standards-progression-grade-3-grade-4>

Grade 4 to 5:

<http://www.parcconline.org/mcf/english-language-artsliteracy/writing-standards-progression-grade-4-grade-5>

Grade 5 to Grade 6

<http://www.parcconline.org/mcf/english-language-artsliteracy/writing-standards-progression-grade-5-grade-6>

Grade 6 to Grade 7

<http://www.parcconline.org/mcf/english-language-artsliteracy/writing-standards-progression-grade-6-grade-7>

Grade 7 to 8:

<http://www.parcconline.org/mcf/english-language-artsliteracy/writing-standards-progression-grade-7-grade-8>

# NJ ASK Mathematics Assessment

## Grades 3 -8

### 2013

# NJ ASK Mathematics Grades 3 -5

- Common Core State Standards (CCSS) will be assessed.
- <http://www.corestandards.org>
- Instruction for the CCSS should incorporate the mathematical practices. Examples of where these practices can be incorporated can be found in the model curriculum for each grade level and unit.
- <http://www.state.nj.us/education/modelcurriculum/math/>

# Mathematical Practices

## Connecting Content Standards and Mathematical Practices

1. Make sense of problems **and** persevere in solving them.
2. Reason abstractly **and** quantitatively.
3. Construct viable arguments **and** critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate **tools strategically**
6. Attend to precision
7. Look for **and** make use of structure
8. Look for **and** express regularity in repeated reasoning.

# Mathematical Practices (cont.)

## Connecting Content Standards and Mathematical Practices

- Practices combine easily, and a single student behavior could be thought of as exhibiting multiple practices at once.
  - Not a checklist.
- There is an expectation that the mathematical practices develop through the grades as students grow in mathematical maturity and in the sophistication with which they apply mathematics.
  - Need to ensure grade-level appropriate expectations.
- Assessment is moving toward measuring mathematical practices and will be assessed by PARCC in spring 2015.

# NJ ASK Mathematics Grades 3 -5

- NJCCCS had Standards, Strands, and CPIs. The CCSS has Domains, Clusters, and Standards.
- Five Domains exist for Grades 3-5:
  - Operations and Algebraic Thinking (OA)
  - Number and Operations in Base Ten (NBT)
  - Numbers and Operations – Fractions (NF)
  - Measurement and Data (MD)
  - Geometry (G)
- Within the Domains, there are the Clusters which contains a group of Standards.

# NJ ASK Mathematics Grades 3 -5

Domain	Grade 3 Standards	Grade 4 Standards	Grade 5 Standards
Operations & Algebraic Thinking (OA)	9	5	3
Numbers and Operations in Base Ten (NBT)	3	6	8
Number and Operations – Fractions (NF)	7	12	11
Measurement and Data (MD)	12	8	8
Geometry (G)	2	3	4
Total	33	34	34

Grade 3 – 66 CPIs in NJCCSS

Grade 4 – 97 CPIs in NJCCSS

Grade 5 – 62 CPIs in NJCCSS



# NJ ASK Mathematics Grades 3 -5

- The CCSS are much more focused and specific.
- Breakdown of the instructional emphasis as written in the PARCC Frameworks can be found at <http://www.parcconline.org/parcc-content-frameworks>. However, no material in the standards should be excluded.

	Grade 3 Domain (# of clusters)	Grade 4 Domain (# of clusters)	Grade 5 Domain (# of clusters)
Major	OA (4), NF (1), MD (2)	OA (1), NBT (2), NF (3)	NBT (2), NF (2), MD (1)
Supporting	MD (1), G (1)	OA (1), MD (2)	MD (2)
Additional	MD (1), NBT (1)	OA (1), MD (1), G (1)	OA (2), G (2)

# NJ ASK Blueprint Grades 3 -5

- The test blueprint is exactly the same as in previous years

Day	Part	Grade 3	Grade 4	Grade 5
1	1 No Calculator	8 SCRs 20 min.	8 SCRs 20 min.	10 SCRs 20 min.
1	2 No Calculator	11 MC 19 min.	11 MC 19 min.	13 MC & 1 ECR 30 min.
1	3 No Calculator	8 MC & 1 ECR 24 min.	8 MC & 1 ECR 24 min.	5 MC & 1 ECR 18 min.
2	4 With Calculator	8 MC & 1 ECR 20 min.	8 MC & 1 ECR 20 min.	10 MC & 1 ECR 25 min.
2	5	8 MC & 1 ECR 24 min. No Calculator	8 MC & 1 ECR 24 min. No Calculator	10 MC & 1 ECR 25 min. With Calculator
2	6	8 MC & 1 ECR 24 min. No Calculator	8 MC & 1 ECR 24 min. No Calculator	5 MC & 1 ECR 18 min. With Calculator

MC- multiple choice, 1 raw score point; SCR- short constructed-response, 1 raw score point  
ECR- extended constructed-response, 3 raw score points

# NJ ASK Mathematics Score Categories for Grades 3-5

Domain	Grade 3 # of Points	Grade 4 # of Points	Grade 5 # of Points
Operations and Algebraic Thinking (OA)	14	10	6
Number and Operations – Fractions (NF)	11	18	14
Measurement and Data (MD)	13	6	13
Geometry (G)	6	6	6
Number and Operations in Base Ten (NBT)	6	10	11
TOTAL	50	50	50

# NJ ASK Mathematics Grades 3 -5

## Manipulatives

- ALL students are allowed to use blank grid/graph paper during **ALL** parts of the Mathematics section of the NJ ASK 3-5.
- There are no longer the colored shapes for grades 3 and 4.
- Grade 3 will be given only a ruler ( $\frac{1}{4}$ " and mm).
- Grade 4 will be given a ruler ( $\frac{1}{8}$ " and mm) AND a protractor.
- Grade 5 will be given a ruler ( $\frac{1}{8}$ " and mm) and a formula/conversion sheet.

# Reminder

## Grades 3-5

- For **Part 1**, students with IEPs or 504 plans may be provided with only the ruler (Grades 3-5), protractor (Grade 4), and reference sheet made available to all students during the assessment. **No additional manipulatives are permitted.**
- For **Parts 2 through 6**, in addition to the ruler, protractor, and reference sheet, an IEP or 504 team may select one or more of the following manipulatives for a child with a disability who requires them in order to complete math test items:
  - Counting Chips;
  - Abacus; and/or
  - Number Line
- Consistent with our policies in years past, students with IEPs or 504 plans **may not** be provided with coins, math fact tables, or three-dimensional counting blocks or rods during any part of the mathematics assessment.

# NJ ASK Mathematics Grades 3 -5

## Short Constructed-Response (SCR)

- Short constructed-response (SCR) items only require an answer.
- Answer is printed in space provided in test booklet (third and fourth grade).
- For fifth grade, answer is printed in space provided in answer folder.
- Units of measurement are not necessary (i.e., liters, inches, or millimeters).
- Credit is given only for a correct answer.
- SCRs are worth 1 point each.

# NJ ASK Mathematics Sample Item

## Grade 3 SCR (non-calculator)

Find the number that belongs in the box.

$$5 = \boxed{\phantom{00}} \div 4$$

Place your answer here: \_\_\_\_\_

Correct answer: 20

**Standard Assessed: 3.OA.4**

# NJ ASK Mathematics Sample Item

## Grade 4 SCR (non-calculator)

Find the product of  $39 \times 11$ .

Place your answer here: \_\_\_\_\_

Correct answer: 429

**Standard Assessed: 4.NBT.5**



# NJ ASK Mathematics Sample Item

## Grade 5 SCR (non-calculator)

A gallon contains 128 ounces. Paul wants to divide 3 gallons of apple cider equally among the 2 dozen friends at his party. How many ounces of apple cider will each friend receive?

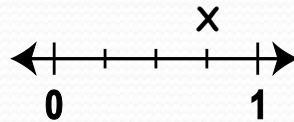
Correct answer: 16

**Standard Assessed: 5.NBT.6**

# NJ ASK Mathematics Sample Item

## Grade 3 Multiple Choice

On the number line below, on which fraction is the letter X?



- A.  $\frac{1}{4}$
- B.  $\frac{2}{4}$
- \*C.  $\frac{3}{4}$
- D.  $\frac{4}{4}$

**Standard Assessed: 3.NF.2**

# NJ ASK Mathematics Sample Item

## Grade 4 Multiple Choice

Each person at a party will eat  $\frac{3}{8}$  of a pound of pretzels. If there will be 5 people at the party, how many pounds of pretzels will be eaten?

- A.  $\frac{3}{8}$
- B.  $\frac{5}{8}$
- \*C.  $\frac{15}{8}$
- D.  $\frac{40}{8}$

**Standard Assessed: 4.NF.4**

# NJ ASK Mathematics Sample Item

## Grade 5 Multiple Choice

Find the sum of  $\frac{2}{3} + \frac{7}{4}$ .

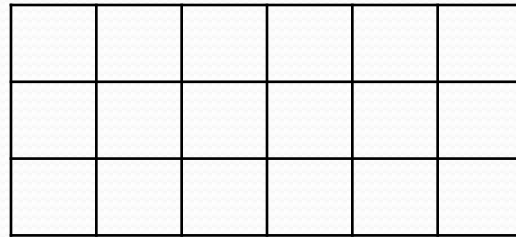
- A.  $\frac{9}{12}$
- B.  $\frac{5}{7}$
- C.  $\frac{9}{7}$
- \*D.  $\frac{29}{12}$

**Standard Assessed: 5.NF.1**

# NJ ASK Mathematics Sample Item

## Grade 3 ECR

Use the rectangle below to answer the following questions.



$$\square = 1 \text{ sq. in}$$

- What is the area, in square inches, of the rectangle? (18)
- What is the length, in inches, of the rectangle? (6)
- What is the width, in inches, of the rectangle? (3)
- How can you find the area of the rectangle if you have only its length and width? (you can multiply the length times the width)

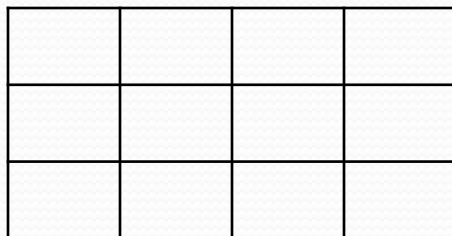
**Standard Assessed: 3.MD.7**

# NJ ASK Mathematics Sample Item

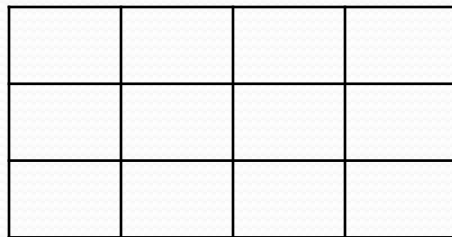
## Grades 4 ECR

**Standard Assessed: 4.NF.2**

Shade  $\frac{1}{2}$  of the figure below. (6 blocks should get shaded)



Shade  $\frac{2}{3}$  of the figure below. (8 blocks should get shaded)



Which fraction is larger,  $\frac{1}{2}$  or  $\frac{2}{3}$ ? Explain your answer.

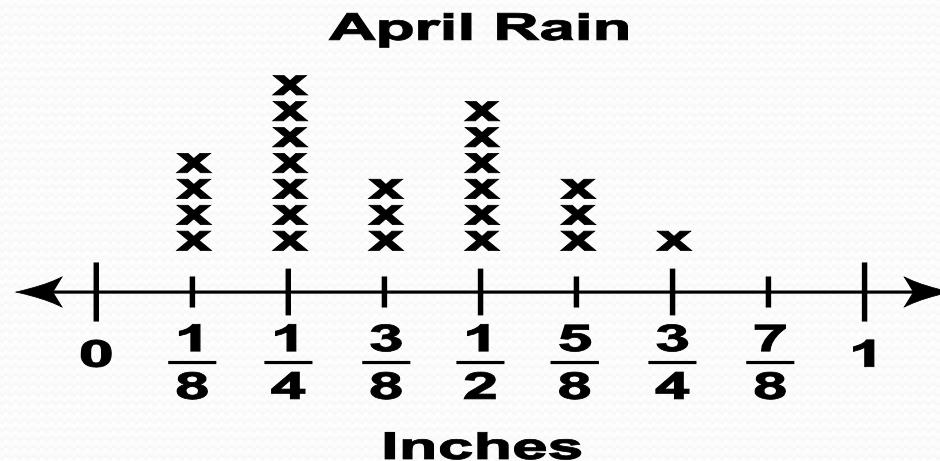
( $\frac{2}{3}$  is larger because I shaded 8 blocks for  $\frac{2}{3}$  and 6 blocks for  $\frac{1}{2}$ , since  $8 > 6$ , then  $\frac{2}{3} > \frac{1}{2}$ )

# NJ ASK Mathematics Sample Item

## Grades 5 ECR

**Standard Assessed: 5.MD.2**

During one day in April, rain gauges were set up in different locations around New Jersey to measure the amount of rainfall in inches. The line plot below shows the results.



- What was the total amount of rain collected by all of the rain gauges? Show your work or explain your answer. ( 9 inches.  $\frac{4}{8} + \frac{7}{4} + \frac{9}{8} + \frac{6}{2} + \frac{15}{8} + \frac{3}{4} = 9$  )
- If all the rain collected was poured equally among each of the rain gauges, how many inches of rain would be in each gauge? Show your work or explain your answer. (since there are 24 gauges and a total of 9 inches of rain, there would be  $\frac{9}{24}$  or  $\frac{3}{8}$  inch in each gauge.)

# NJ ASK Mathematics Grades 6-8: 2013 Updates

- Assessment and Score Reporting for **SPRING 2013** will be aligned to the New Jersey Core Curriculum Content Standards.
- Assessment and Score Reporting for **SPRING 2014** will be aligned to the Common Core State Standards for Mathematics.



# NJ ASK Mathematics Grades 6-8: 2013 Updates (cont.)

- The grades 6 and 7 manipulatives sheet will **NO** longer be provided because no assessment items will require its use.
- The grades 6 and 7 reference sheets will now be produced on card stock and will include a punch-out protractor and a punch-out ruler to supplement the formulas and conversion factors (equivalents).
- The grade 8 reference sheet will still be produced on card stock and will now include a punch-out protractor to supplement the punch-out ruler, formulas, and conversion factors (equivalents).
- The updated reference sheets will be available online shortly.

# NJ ASK Mathematics Grades 6-8: 2013 Updates (cont.)

- ALL students are allowed to use blank grid/graph paper during **ALL** parts of the Mathematics section of the NJ ASK 6-8.

# NJ ASK 6-8 Mathematics: Calculator Use Policy

- Part 1 of the test is non-calculator for all students, including students with disabilities.
- Three of the remaining five parts (parts 4 through 6) are calculator active. These parts will include multiple-choice (MC) and extended constructed-response (ECR) items.

# NJ ASK 6-8 Mathematics: Calculator Use Policy (cont.)

- Parts 2 and 3 are non-calculator, except for students with disabilities.
- Students classified with a specific disability that limits him or her from calculating mathematically may use a calculator and/or manipulatives (i.e., abacus, number line, counting chips) on parts 2 and 3.

# NJ ASK 6-8 Mathematics: Calculator Use Policy (cont.)

- Students accommodated through the use of calculators must have the assessment administered to them in an alternative setting.
- The use of a calculator or other specific manipulatives as an instructional and assessment accommodation must be documented in the student's IEP or 504 plan. The SCR part will remain non-calculator.

# Mathematics (Grades 6-8)

MC- multiple choice, 1 raw score point

SCR- short constructed-response, 1 raw score point

ECR- extended constructed-response, 3 raw score points

		Grade 6	Grade 7	Grade 8
Item Count by Type (does not include embedded field test content)	MC	32	32	32
	SCR	8	8	8
	ECR	3	3	3
Total raw score points possible		49	49	49
Approximate total testing time (including field test content)		133 minutes	133 minutes	133 minutes

# Mathematics: Points by Standard

Point Breakdown	Grade 6	Grade 7	Grade 8
Number and Numerical Operations	13	13	13
Geometry and Measurement	14	14	14
Patterns and Algebra	14	14	14
Data Analysis, Probability, and Discrete Mathematics	8	8	8
Total Points	49	49	49
Calculator Active 26 Points		Non-Calculator Active 23 Points	

# Mathematics Sample SCR Item

## Grade 6

### Cumulative Progress Indicator (CPI) to be Assessed

4.2.6 E.2 Develop and apply strategies and formulas for finding perimeter and area.

### Item

Sharon has a garden in the shape of a circle with a diameter of 12 feet. Sharon would like to put a border around the garden equal in length to the circumference of the garden. What is the approximate length, in feet, of the border of the garden?

Answer: 37.68,  $264/7$  or approximate equivalent

Note: Each SCR item is scored a 0 or a 1 -- credit is given for a correct answer. With only 1 point to earn, items are structured so units are not required in the answer (see above, feet are not required in the answer. Scoring can handle multiple forms, or close approximates, of an answer (see above, correct answers include using 3.14 or  $22/7$  for pi).



# Mathematics Sample Non-Calculator Multiple-Choice Item

## Grade 7

### CPI to be Assessed

4.1.7 B.3 Understand and apply the standard algebraic order of operations, including the appropriate use of parentheses.

### Item

What is the value of the expression  $15 - 3(2 + 1)$ ?

- A. 108
- B. 36
- C. 23
- D. 6\*

Note: Since many modern calculators perform calculations using the standard algebraic order of operations, this CPI needs to be assessed in a non-calculator format. The incorrect answer choices may contain common errors- for B above the subtraction was performed before the multiplication.

# Mathematics Sample Multiple-Choice Calculator Active Item

## Grade 8

### CPI to be assessed

4.2.8 D.1 Solve problems requiring calculations that involve different units of measurement within a measurement system.

### Item

Luis is tiling the rectangular floor of a room measuring 8 feet 6 inches by 12 feet. How many 6 inch by 6 inch tiles will Luis need to tile the floor without overlapping?

- A. 408\*
- B. 287
- C. 204
- D. 172

Note: Since the essence of this CPI is about converting units using the appropriate conversion factors, a calculator would be permitted to facilitate calculations.

# NJ ASK 2013

## Common Core Resources

<http://www.state.nj.us/education/sca/>

<http://www.corestandards.org>

<http://www.parcconline.org/>

# NJ ASK Science Assessments

## Grades 4 & 8

### 2013

# Science (Grade 4 & 8)

- Assessment and Score Reporting for **SPRING 2013** will be aligned to the New Jersey Core Curriculum Content Standards.
- Science assessment includes four parts.
- Each MC item is worth one point; each open-ended item is worth up to three points.
- Each open-ended item is scored using an item-specific rubric.
- Life Science – 40 percent of the test
- Physical Science – 30 percent of the test
- Earth Science – 30 percent of the test

# Science(Grade 4 & 8)

		Grade 4	Grade 8
Item Count by Type (does not include field test content)	Multiple-Choice	33	48
	Open-Ended	2	2
Total raw score points possible		39	54
Approximate total testing time (includes field test content)		60 minutes	120 minutes

# Science (Grade 4 & 8)

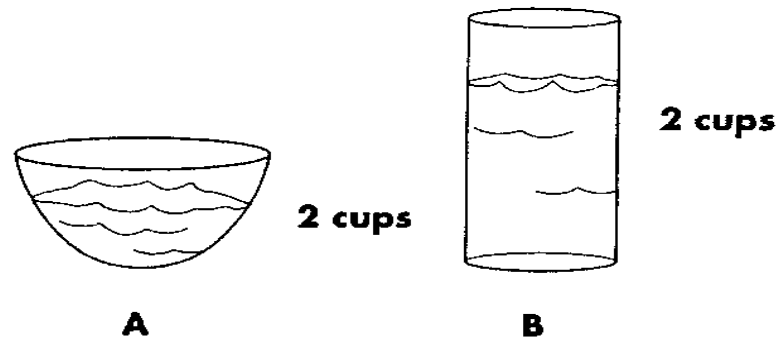
- Organisms can only survive in environments in which their needs are met. Within ecosystems, organisms interact and are dependent on their physical and living environment.
- In 1962, Rachel Carson wrote the book Silent Spring, warning society about the effects of insecticides. Which of the following facts about ecosystems explains why insecticides are harmful to the environment?
  - A. Ecosystems are very large.
  - B. Ecosystems have both living and non-living things.
  - C. Living things in ecosystems are interdependent.\*
  - D. Many kinds of organisms are found in difference ecosystems.

**Science 5.3.4.C1**

# Science Grade 4 Sample Item

Many substances can be changed from state to another by heating or cooling.

**Two cups of water were placed into each of the open containers. Predict what the water levels will be tomorrow.**



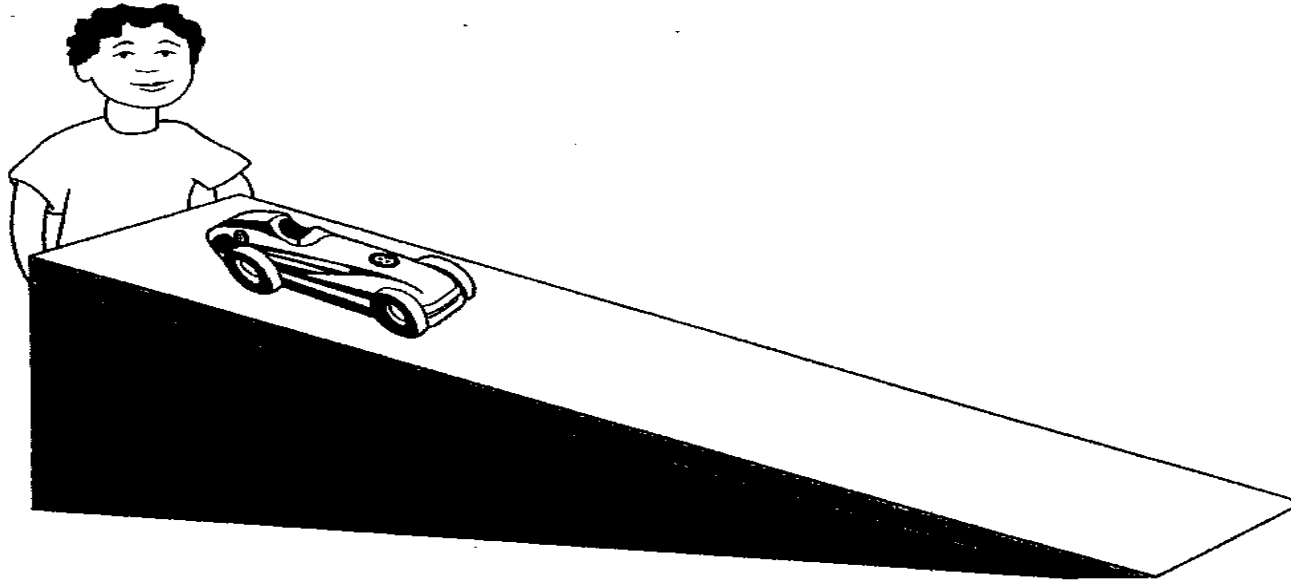
- Ⓐ The same amount of water will be left in both.
- Ⓑ There will be more water left in container B than in A. ★
- Ⓒ There will be more water in container A than in B.
- Ⓓ They will both still have two cups of water.

**Science 5.2.4.B.1**



# Science Grade 4 Sample Item

There is always a force involved when something starts moving or changes its speed or direction. A greater force can make an object move faster and farther.



**Jim put a toy car on a ramp. The car slowly moved down the ramp. What was it about the ramp's surface that caused the car to move slowly?**

**How could Jim change the ramp's surface to get the car to move faster?**

**Science 5.2.4.E.2**

# Science Grade 8 Sample Item

Properties of solids, liquids, and gases are explained by a model of matter as composed of tiny particles (atoms) in motion.

A student places Beaker X containing one liter of water on a burner. The student places Beaker Y containing one liter of water in the freezer. What is occurring in the samples?

- A. Beaker X: phase change  
Beaker Y: chemical change
- B. Beaker X: chemical reaction  
Beaker Y: physical change
- C. Beaker X: increasing kinetic energy  
Beaker Y: decreasing kinetic energy
- D. Beaker X: cold is moving out of the water  
Beaker Y: cold is moving into the water

**Science 5.2.8.A3**

# Science Grade 8 Sample Item

Earth's tilt, rotation, and revolution around the Sun cause changes in the height and the duration of the Sun in the sky. These factors combine to explain the changes in the length of day and seasons.

Choose two consecutive seasons.

- Fully describe the changes in daylight hours you will experience as you go from the first day of one season to the last day of the other season you have chosen.
- Explain what is happening to cause these changes.

**Science 5.4.8.A2**

# Spanish Versions for English Language Learners (ELL)

- Spanish versions of the NJ ASK 3-8 are available in all content areas – Language Arts Literacy, Mathematics, and Science (Grades 4 and 8).
- Participation/Eligibility guidelines are posted here:  
[https://www.measinc.com/nj/Downloads/NJASK/NJ\\_ASK\\_Spanish\\_Eligibility\\_Guidelines.pdf](https://www.measinc.com/nj/Downloads/NJASK/NJ_ASK_Spanish_Eligibility_Guidelines.pdf)
- Spanish versions are ordered by districts through the usual Online Materials Survey process.

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